

1	PLURAL UNIT	38	..Hollow shield around filament or cathode
2.1	.Cathode ray tube		
3	.Inter-electrode connection	39	.For electrode within an envelope
5	.Control electrode unit	40	..Radiating type surface
6	..Plural control electrode units	41	...Material, roughened surface
7	WITH EVACUATING PUMP	42	.Mounted on lead-in or electrode support
8	ARC AND SEPARATE INCANDESCENT BODY	43	.For lead-in-seal or stem protection
9	FILAMENT AND SEPARATE INCANDESCENT BODY	44	.For envelope wall
10	WITH TEMPERATURE INDICATOR	45	.Radiating type surface
11	WITH TEMPERATURE MODIFIER	46	.Having heat conducting path
11.5	.Spark plug type	47	.Heat conserving or insulating type
12	.Recirculating systems		
13	.Having control means for the temperature modifier	48	WITH HANDLE
14	.Pyroelectric type device	49	WITH DETACHABLE ELECTRICAL CONNECTOR OR SUPPORT
15	.Electric heater	50	.Resilient or vibration damping
16	..For liquid electrode	51	.Electrical connector
17	.Double wall, jacket or casing for envelope	52	CONVERTIBLE
18	..For conductive envelope devices	53	FLAME OR EXPLOSION TYPE
19	...With plural electrode temperature modifying	54	WITH RADIOACTIVE MATERIAL
20	...With internal temperature modifying baffle	62	CYCLOTRONS
21	...Cylindrical electrode type envelope	359.1	WITH POSITIVE OR NEGATIVE ION ACCELERATION
22	..Fluid circulation type	360.1	.Plural apertured electrodes
23	...Plural electrode temperature modifying	361.1	.Means for deflecting or focusing
24	...Flow directing means in casing	362.1	.Supplying ionizable material (e.g., gas or vapor)
25	..Sealed casing for envelope	363.1	.Extraction or target electrode
26	...Integral double wall type of envelope	364	CATHODE RAY TUBE
27	..Heat conserving or insulating type	365	.Image pickup tube
28	..Plural electrode temperature modifying	366	..Semiconductor depletion layer type
29	.For liquid electrode	367	...Mosaic
30	.Hollow electrode or lead	368	....Plural junction
31	..Tubular coil electrode	369	..Mechanically responsive (e.g., sound)
32	..Closed duct type (e.g., for liquid)	370	..Particular transparent conductor
33	.Envelope with internal temperature modifying baffle	371	..With optical element
34	.Envelope with condensing chamber or surface	372	...Light conducting fiber or rod
35	.Using liquids or fluid flow directing means	373	..With photoemissive cathode
36	..Jacket or casing	374	...Mosaic
37	.For filament or heated cathode	375	...Plural photoemissive layers
		376	...With target
		377	....Secondary electron emissive
		378	....Support
		379	...Secondary electron emissive
		380	...Special ray sensitive
		381	...Image dissector
		382	...Focusing
		383	...Electrode or electrode support

384	..Photoconductive	429	....Field varied near screen (i.e., post deflection)
385	...Layer composition	430	.....By external element
386	....Plural layers	431	....Plural magnetic
387	...Secondary electron emissive	432	...Electrostatic
388	...Special ray sensitive	433	....Magnetic
389	...Focusing	434	....Nonparallel or asymmetric
390	...Electrode or electrode support	435	.....Nonplanar
391	.Storage	436	....Enclosed or overlapping
392	..Depletion layer type storage element	437	....With distortion correction
393	..Double ended	438	....With support
394	..Continuous storage element	439	..Electrostatic
395	..Foraminous storage element	440	..With yoke
396	..With non-beaming gun	441	.Ray generating or control
397	..With display	442	..With magnetic focus
398	...Integral or contiguous storage and display element	443	...Internal
399	.Secondary emissive electrode	444	..Sandwiched electrodes
400	..With display	445	..Canted electrode (i.e., ion trap)
401	..Monoscope	446	..Including cathode assembly
402	.Shadow mask, support or shield	447	...With control grid adjacent cathode
403	..Non-circular aperture	448	....With anode
404	..With resilient support	449	.....With additional electrode
405	...Bimetallic	450	.....With coating or spiral electrode
406	..With studs	451	.....With support
407	..With frame	452	...With focus electrode adjacent cathode
408	..With screen	453	....Noncircular beam type
409	.Plural beam generating or control	454	....Nonplanar cathode
410	..With character forming electrode	455	.....Brillouin beam type
411	..One cathode source of plural beams	456	..With support for electrode
412	..Convergence	457	...Parallel rod type
413	..With deflection	458	..Electrode
414	..With focusing and accelerating electrodes	459	...Movable
415	..With screen	460	...Plural
416	...Including non-planar elements	461	.Screen
417	..With electrode support	462	..Scale or graticule
418	.Signal translating output electrode	463	..Electroluminescent
419	..Plural	464	..Incandescent type
420	.Electron permeable window	465	..Light valve type
421	.Beam deflecting means	466	..Nonluminescent layer
422	..Flat tube type	467	..Phosphor composition
423	..Electron reflecting mirror	468	...Rare earth
424	..Ion trap	469	...Embedded in face plate
425	..Centering	470	..Mosaic
426	..Plural	471	...Beam indexing element
427	...Three or more	472	...Dot type
428	....With convergence	473	..Plural layer type
		474	..With optics
		475	...Light conducting fiber or rod
		476	..Support

477 R	.Envelope	489	...With protective coating or filter
478	..With external optical element	490	...With amalgam
479	..Coating or shielding	491	...Electrode structure or material
480	..Composition	492	....With shield or additional electrode
481	..With getter or gas	493	...Envelope structure or material
482	..Support for electrode or envelope	494	.Coplanar electrodes
477 HC	..With details of high-voltage connector	495	.Vacuum-type tube
93	GEIGER-MUELLER TYPE	496	..Phosphor on anode segments
523	PHOTOSENSITIVE	497	...With accelerating or control electrode
524	..With optical device	498	.Solid-state type
525	..Having phosphor screen	499	..Semiconductor depletion layer type
526	..Proximity focus type	500	...Matrix or array
527	..Photocathode responsive to phosphor	501	...Light conversion
528	..With electron multiplier	502	..With phosphor embedding material
529	..With control electrode	503	..With particular phosphor or electrode material
530	..With photocathode on envelope	504	...Organic phosphor
531	..Having plural photosensitive electrodes	505	..With electrode matrix
532	.Photomultiplier	506	..Plural layers
533	..Having plural dynodes	507	...With photosensitive layer
534	...Channel or circular type	508	...With piezoelectric layer
535	...Venetian blind type	509	...With dielectric layer
536	...Box or linear type	510	..With character display (e.g., digits or letters)
537	..Having a control electrode	511	..Flexible
538	.Gas phototube	512	..With envelope or encapsulation
539	..Responsive to ultraviolet radiation	513	WITH CHARACTER DISPLAY (E.G., DIGITS OR LETTERS)
540	..Having plural anodes or cathodes	514	.Gaseous discharge medium
541	..Having photocathode on tube wall	515	..With character-shaped envelope
542	.Photocathode	516	..Electrode with character-shaped aperture
543	..With phosphor	517	..With electrode display segments
544	..With envelope	518	...With dielectric layer or coating
103 R	..Secondary emitter type (e.g., electron multiplier)	519	...Multiple display (i.e., side-by-side)
103 CM	..Channel multiplier	520	..With integrant display electrode
104	..Plural secondary emissive electrodes	521	...Stacked electrodes (i.e., superimposed)
105 R	..Three or more	522	.Incandescent filament display
105 CM	...Channel multiplier	110	WITH OPTICAL DEVICE OR SPECIAL RAY TRANSMISSIVE ENVELOPE
106	SECONDARY EMISSION PREVENTION	111	.Plural diverse optical devices
107	.Nonemissive material	112	.Polarizer or special ray transmission (e.g., filter)
107.5	VARIABLE WIDTH ELECTRON STREAM (E.G., MAGIC EYE)	113	.Reflector
483	WITH LUMINESCENT SOLID OR LIQUID MATERIAL		
484	..With gaseous discharge medium		
485	..Phosphor on envelope wall		
486	...Including particular phosphor		
487	....Plural		
488	...Aperture-type tube		

114	..Plural reflectors	148	.Movable envelope wall
115	..Multiple filament lamps	149	.Rotary
116	.Light diffusing	150	.Movable liquid electrode
117	.Light valve or obscuring means	151	.Thermal actuator
118	SPARK PLUGS	152	.Magnetic actuator
119	.Sealing-off valve for electrode chamber	153	WITH MAGNETIC DEVICE
120	.With fluid feed or air vent	154	.For generating plural fields
121	.Reversible (e.g., part)	155	.Electrode generates field
122	.Removable electrode on shell	156	.Field transverse to discharge
123	.Plural series gaps	157	..Concentrically arranged electrode with axial field
124	..Intensifier in center electrode lead-in	158	...Pole pieces facing electrode ends
125	.Movable electrode (e.g., for cleaning, adjustable)	159	....Electrode support penetrates pole piece
126	..Automatically moved (e.g., engine vibration)	160	.With envelope
127	.Cleaner (e.g., movable scraper)	161	..Gas or vapor type
128	.Plural insulated electrodes with individual lead-in	162	..Three or more electrodes
129	.With transparent part	163	LIQUID ELECTRODE DISCHARGE DEVICES
130	.Non-conducting material in or adjacent gap (e.g., restricts spark)	164	.Shock absorber for liquid
131 R	..Non-shortest line spark and surface spark type	165	.Plural liquid electrodes
131 A	...Spark plugs with semiconductive material at the gap	166	.Starting band or external electrode
132	.Capillary groove or space	167	.Apertured electrode (e.g., grid) interposed in discharge space
133	.Ball electrode	168	.Plural anodes in separate envelope chambers
134	.With radio shielding	169	.Plural anodes with anode arc shield
135	.With particular connector structure	170	.Auxiliary starting or holding electrode
136	.Plural part center electrode lead-in	171	..Immersed in liquid electrode
137	.Plural part insulating means	172	.Liquid in contact with plural electrodes
138	.Electrodes are pure figures of revolution about plug axis	173	.Cathode spot anchoring
139	.Ring or disk electrode (e.g., sector)	545	HAVING VALVE WITH GETTER, GAS/ VAPOR GENERATING MATERIAL OR PRESSURE CONTROL MEANS
140	.Plural parallel gaps (e.g., main and standby, serrated electrode)	546	WITH FRANGIBLE CAPSULE CONTAINING GETTER, GAS OR VAPOR GENERATING MATERIAL
141	.Particular electrode structure or spacing	547	HAVING HEATING MEANS TO CONTROL GAS/VAPOR, GAS OR VAPOR GENERATING MEANS, OR GETTER MEANS
142	..Gap on and along axis	548	.Incandescent lamp gettering
143	.Shaped electrode chamber, insulator end, shell skirt, baffle or gas directing means	549	.Discharge device gettering
144	.With specific joint structure	550	.Vapor generating
145	..Between center electrode and insulator	551	.Gas generating
146	WITH MOVABLE ELECTRODE OR SHIELD	552	HAVING PRESSURE CONTROL OF GAS OR VAPOR
147	.Plural	553	WITH GETTER
		554	.Plural
		555	..Diverse

556	.And vapor generator	593	....Plural
557	.Incandescent lamp type	594	..Start electrode exterior to envelope
558	.Electrode includes getter, supports getter, or is connected to getter	595	..Internal start or control electrode between discharge electrodes
559	.Mounted on electrode support	596	...Strip electrode
560	.With structure to direct or shield from getter	597	...Interposed apertured electrode
561	.With contained getter	598	....Mean free-path spacing
562	.Gas or vapor device type	599	....Plural serial apertured electrodes
563	HAVING GAS GENERATING MATERIAL	600	...Two interposed electrodes
564	HAVING VAPOR GENERATING MATERIAL	601	..Start electrode not in main discharge path
565	.Mercury vapor material	602	...Trigger electrode concentric with discharge electrode
566	.Electrode or electrode support includes material	603	...Triggerable vacuum gap device
567	WITH GAS OR VAPOR	604	..Plural serial electrodes
568	.Having a particular total or partial pressure	605	.Mean free-path spacing of envelope portions or content parts
569	..Incandescent lamp	606	..Electrode spacing related to mean free path length
570	..Greater than 760 torr	607	.Having electrode exterior to envelope
571	...Includes mercury in gas or vapor fill	608	.Single electrode type discharge device, or including particulate material
572	..One torr thru 760 torr	609	.Having baffle, partition, or constricting means affecting discharge
573	...Having specified envelope detail	610	..Partition
574	...With electrode structure	611	..Constriction means
575	....Composite	612	...Substantially the full length of discharge path
576	.....With rare gas	613	.Having electrode shield
577	..Less than .1 torr	614	..With anode shield
578	.Incandescent filament lamp	615	..Crater electrode with shield
579	.Tungsten-halogen cycle lamp	616	..With positive ion or cathode shield
580	..With filter, barrier, screen, shield, electric terminal or fuse	617	.Having spur electrode
581	.Three or more electrode discharge device	618	.Having hollow cathode
582	..Multiple gaseous discharge display panel	619	.Negative or cathode glow device
583	...Having electric terminal detail	620	.Having specified electrode spacing
584	...Having intersecting electrode sets	621	.Having electrodes with geometrical relationship
585	....With three sets of electrodes	622	.Discharge device with diverse electrodes
586	....With dielectric member	623	.Having electrode lead-in or electrode support sealed to envelope
587	.....And additional layer on member	624	..End cap seal
588	..Amplifier, cathanode, or ionic cathode	625	..End plug seal
589	..Counter, indicator, or switching tube	626	.Having lead-in shield
590	..With shield to prevent discharge between electrodes		
591	..Having cathode heater		
592	...With control electrode		

627	..Having electrode heated by space discharge current	242	..Shield supported by or forming part of envelope stem
628	..Coil type	243	.For plural electrodes of discharge device
629	..Having resistance heated cathode	244	..Envelope supports or forms electrode
630	..Having electrode of alkali, alkaline or rare earth material	245	...Plural discharge spaces formed by three or more electrodes
631	..Having particular electrode structure	246	...Electrode forms part of envelope
632	..Cathode or anode	247	....Hollow electrode with another electrode supported by end structure
633	..Electrode composition	248	...Conductive envelope supports plural electrodes
634	..Envelope with particular structure	249	...Elongated envelope with electrodes spaced along length
635	..Envelope layer or coating	250	....With spacer between electrodes or electrode supports
636	..Envelope composition	251	....Plural electrodes supported along the length of a wire, rod, or tube
637	..With particular gas or vapor	252	...Support structure supported by the envelope
638	..With metal vapor	253	....At spaced or opposed portions of envelope
639	...Mercury vapor	254	.....At three or more portions of envelope
640	....And rare earth metal	255	.....Same electrode supported by spaced or opposed portions
641	....With rare gas	256	...Insulating or ceramic support rod or tube
642	....And rare gas	257	...With spacer between electrode or electrode supports
643	..One or more rare gases	258	....Spacer between envelope and support or electrode
230	DISCHARGE DEVICE WITH POSITIVE ION EMITTER	259	....Insulating coating forms spacer
231.01	FLUENT MATERIAL SUPPLY OR FLOW DIRECTING MEANS	260	....Plate or bar extending across ends of electrodes
231.11	..Lightning or surge arrester	261	.....Plates or bars at opposed ends of electrodes
231.21	..Expulsion type	262	....Ceramic bead for joining parts
231.31	..Plasma	263	...With indirectly heated cathode
231.41	..Arc discharge type	264	...With U-shaped, V-shaped, or plural sections filament
231.51	...With tangential fluent supply	265	...Apertured electrode (e.g., grid) supported between two other electrodes
231.61	...Electromagnetic output (i.e., light)	266	...Stem or envelope structure
231.71	..Arc discharge lamp or radiation source	267	..Plural rod electrodes
232	ELECTRODES IMMersed IN LIQUID		
233	INVOLVING PARTICULAR DEGREE OF VACUUM		
234	ELECTRODE EXTERIOR TO ENVELOPE		
235	IMPERFECT ELECTRICAL CONTACT BETWEEN ELECTRODES		
236	STAND-BY ELECTRODE TYPE (WITH SPARE ELECTRODE)		
237	WITH ELECTRODE REPLACEMENT MEANS OR DEMOUNTABLE		
238	WITH SUPPORT AND/OR SPACING STRUCTURE FOR ELECTRODE AND/OR SHIELD		
239	..For shield		
240	..Shield supported by electrode, electrode support, or spacer		
241	...Extending across ends of plural discharge device electrodes		

268	..Insulating spacer between discharge electrodes	300	...Three or more serially arranged
269	..With vibration damping device	301	..Plural interelectrode discharge spaces
270	..For indirectly heated cathode	302	.Plural cathodes
271	..For filament	303	.Three or more nonemissive electrodes (e.g., plural anodes)
272	..Plural filaments	304	.Plural-parallel-section cathode with electrode surrounding each section
273	..Plural section filament	305	DISCHARGE HEATED ANODE TYPE (E.G., CATHANODE)
274	..Supports supported by opposed parts of envelope	306	DISCHARGE DEVICES HAVING THREE OR MORE ELECTRODES
275	..Insulator supports filament	307	.Four or more electrodes
276	...Conductive member supports insulator	308	.Discharge control electrode
277	...Insulating standard supports filament brackets or anchors	309	DISCHARGE DEVICES HAVING A MULTIPOINTEDED OR SERRATED EDGE ELECTRODE
278	..Tension device for filament	310	DISCHARGE DEVICES HAVING A THERMIONIC OR EMISSIVE CATHODE
279	..Support intermediate of filament ends	311	DISCHARGE DEVICES HAVING AN ELECTRODE OF PARTICULAR MATERIAL
281	..Support mounted in or around aperture in conductive wall or plate	312	WITH CASING OF JACKET FOR ENVELOPE
282	.Conductive envelope supports electrode	313	WITH ELECTRICAL SHIELD OR STATIC CHARGE DISTRIBUTION MEANS
283	.Electrode supported by envelope	314	NONREPAIRABLE
284	..Electrode supporting member supported by envelope	315	INCANDESCENT LAMPS
285	...Supporting wire, rod, or tube supported by envelope	316	.Plural filaments or glowers
286	....At spaced or opposed portions of envelope	317	WITH ENVELOPE
287	....Support collar surrounding envelope stem	318.01	.Having base and connector
288	....Spacer between envelope and support or electrode	318.02	..Secure to each end of a double-ended or tubular envelope
289	....Ceramic or insulating support	318.03	..Having an annular contact disposed concentrically about the longitudinal axis of the envelope
290	....Stem or envelope structure	318.04	...Having screw thread coupling contact
291	..Electrode formed by coating on envelope	318.05	..Having spaced, longitudinally engaging, pronglike contacts
292	..Supporting and/or spacing elements	318.06	..Having three or more electrical contacts
293	DISCHARGING DEVICES WITH APERTURED ELECTRODE (E.G., GRID) INTERPOSED BETWEEN TWO ELECTRODES	318.07	..Associated with pinch (or press) seal of envelope
294	.Non-uniformly spaced from another electrode	318.08	..Base attached to the envelope with cement or adhesive
295	.Interposed electrode with non-uniform mesh area (e.g., variable μ)	318.09	..Base attached to the envelope with friction or other mechanical means
296	.Plural interposed apertured electrodes		
297	..Serially arranged		
298	...Plural interelectrode discharge		
299	...Aligned apertures (e.g., beam power)		

318.1	...Resilient mechanical means for attaching the base to the envelope	356	.Tubular or hollow sleeve
318.11	..Having a reflector in combination with base	357	.Rods
318.12	.Having a connector	358	MISCELLANEOUS (E.G., ELECTROLYTIC LIGHT SOURCE)
323	COMBINED		
324	.With casing or jacket		<u>FOREIGN ART COLLECTIONS</u>
325	MISCELLANEOUS DISCHARGE DEVICES		
326	ELECTRODE AND SHIELD STRUCTURES	FOR	CLASS-RELATED FOREIGN DOCUMENTS
327	.Self-baking electrodes (e.g., Soederberg)		
328	.Liquid electrode container		
329	.Mosaic electrodes		<u>DIGESTS</u>
331	.With lead wire or connector		
332	..Inserted section or material	DIG 7	BOMBARDMENT INDUCED CONDUCTIVITY
333	..Filament or wire shield or electrode		
334	..Nonmetallic electrode or shield		
335	..Rod electrode or shield		
336	.Point source cathodes		
337	.Indirectly heated cathodes		
338	..Plural separate cathode sections		
339	..Interior emissive hollow cathodes		
340	..Insulating material between heater and cathode		
341	.Filament or resistance heated electrodes		
342	..Noninductive		
343	..Plural wires or strands		
344	..Coiled		
345	..Coated		
346 R	.Cathodes containing and/or coated with electron emissive material		
346 DC	..Dispensator cathode		
347	.Incandescible upon electron bombardment		
348	.Foraminous electrodes (e.g., grids) or shields		
349	..Nonuniform mesh area or nonstraight electrodes or nonuniform cross sectional area electrodes		
350	..Rods, wire, or mesh supported on rod or post		
351	.Multipointed or serrated edge electrode		
352	.Composite electrodes or shields		
353	..With non-discharge-sustaining portion		
354	..Cored rod		
355	..Coated or laminated		